



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

Summary of Results.

Of 190 cases examined 187 showed endameba. Of the 187, 78 have been treated for pyorrhea. Of the 78 treated, none lost their endamebæ permanently. The condition of the gums and teeth was greatly improved in 3 cases, moderately improved in 9 cases, slightly improved in 22 cases, while 41 cases remained the same; the results were doubtful in 2 cases and 1 case became worse. Practically all that were found negative for endamebæ at the conclusion of the injections were found positive for endamebæ from two weeks to four months later, in spite of using a solution of ipecac as a mouth wash.

Conclusion.

Emetin is an amebicide, but alone will not cure pyorrhea alveolaris.

Outline of Future Work.

Less confidence will hereafter be placed in the properties of emetin or other preparations of ipecac, although it is not denied that the drug possesses amebicidal properties. It appears necessary to revert to a degree at least to those painstaking and tedious operative procedures, the efficacy of which has long been known to dental surgeons. Just how much assistance is to be expected from the ipecac preparations used in conjunction with operative measures is a question upon which further studies may be expected to throw some light.

Acknowledgments.

Surg. F. C. Smith, in charge of the station, has made valuable suggestions in the preparation of this article. Acting Asst. Surg. H. P. Reid has done most of the microscopical work, and the station dentist, Dr. C. R. Irby, has performed most of the necessary operative work.

NARCOTIC DRUGS.

RECENT LEGISLATION DESIGNED TO RESTRICT THEIR USE.¹

By M. I. WILBERT, Technical Assistant, Division of Pharmacology, Hygienic Laboratory, United States Public Health Service.

While the practicability of effectually controlling the use of narcotic drugs by statute law may reasonably be questioned, it is generally agreed that recent legislation is designed to and will, if properly enforced, effectually place the blame for the continuance of the narcotic-drug abuse where it rightfully belongs. It would also appear possible that, having learned the origin and cause of the

¹ Read at the meeting of the American Society for the Study of Alcohol and Other Narcotics, Washington, D. C., Dec. 16, 1915.

disease, regulative or curative measures could later be more effectually applied.

The practical application of effectual measures to restrict the traffic in narcotic drugs must of necessity depend on the awakening of the people generally to the social and economic importance of preventing the spread of practices that entail physical, mental, and moral degeneration.

Up to the present time the followers of the drug trade at large and the members of the medical profession generally have been indiscriminately accused of fostering and developing the all-too-widespread abuse of habit-forming drugs. That this accusation was wholly unwarranted has been shown by the whole-hearted way in which all branches of the drug trade and all classes of medical practitioners have endeavored to live up to the requirements, at times irksome and annoying, imposed by the regulations issued in compliance with the provisions of the Federal antinarcotic law.

There is also much evidence to indicate that the estimates that have been published from time to time as to the number of drug addicts in the United States are not in keeping with the amount of material available for the use of such addicts.

For a number of years the aggregate amount of coca and opium and their salts and derivatives imported into the United States has undergone but little change. While the nature of the product that was being imported has varied, the sum total of the pharmacopœal doses of the several drugs has been remarkably uniform.

The appended table, based on the quantities of the several drugs entered for consumption in the United States during the years 1912 to 1915, will serve to indicate the limitation of the possible number of confirmed drug habitués in the United States at the present time.

Narcotic drugs—Approximate number of average doses of habit-forming drugs imported into the United States during the fiscal years 1912–1915.

Year.	Coca and cocaine.	Opium and alkaloids.
1912.....	311,000,000	2,308,700,000
1913.....	324,000,000	2,518,800,000
1914.....	194,900,000	2,409,800,000
1915.....	260,900,000	1,986,960,000

The average daily consumption of 2,370 drug addicts in the State of Tennessee has been reported as $8\frac{1}{2}$ grains of morphine, equal to approximately 1,000 average doses each month or 12,000 doses a year.

The average consumption of cocaine is less well established, though we know that it is not unusual for addicts to take the equivalent of from 50 to 100 average doses daily.

On the above basis it would appear that, granting that all of the imported material were used for illegitimate purposes, there could be less than 175,000 opium addicts and fewer than 80,000 cocaine habitués in the United States at the present time.

While it is true that the total amount of opium and of coca consumed annually in this country is out of all proportion to the possible need for medicinal purposes, we have as yet not succeeded in definitely locating the lower limit of the harmful influences of these drugs, nor have we been able to show who is primarily responsible for their abuse, or how this abuse can be most effectually avoided.

Among the many problems of a public-health nature associated with the use and abuse of narcotic drugs no one question is more in need of a satisfactory solution than that of the need for adequate knowledge regarding the nature and extent of the degenerative changes that may be brought about by the long-continued use of comparatively small doses of narcotic drugs. That the human organism can become habituated to and require the continued use of small quantities of such drugs is admitted. That even small doses of active drugs may influence normal metabolism and, in time at least, bring about extensive degenerative changes would appear probable, but much additional work will be required before we can definitely outline the probable nature of the changes that are involved.

Antinarcotic laws as we understand them at the present time had their origin in the antiopium smoking law of Ohio enacted in 1885. Since that time practically every State in the Union has placed on its statute books a more or less comprehensive law designed to regulate the sale and use of narcotic drugs within the State. Practically all of these laws proved to be ineffective, largely because of the fact that being limited in scope and application to persons within the State no efficient means could be found to regulate the importation and distribution of the several drugs from without the State. This shortcoming was finally corrected by the enactment of the Federal antinarcotic law of December 17, 1914, which became effective March 1, 1915. This law promises to provide an effectual regulation of the interstate traffic in opium and coca, their alkaloids and derivatives.

The direct object of the Federal law is to provide a system of records and the statute restricts the traffic in the several drugs to persons engaged in the conduct of a lawful business or in the legitimate practice of one of the professions enumerated in the act. Each sale or distribution of any of the drugs involves the production of certain records and all of the records are open to inspection by officials intrusted with the enforcement of laws, Federal, State, or local, designed to restrict the sale and use of the proscribed drugs.

The active enforcement of the Federal law has already had a wholesome effect in the way of reducing the sale of narcotic drugs. Some of the larger wholesale dealers in drugs are quoted as saying that their sales of drugs of this kind have been reduced from 70 to 80 per cent and retail dealers generally are agreed that the sales of narcotic drugs and preparations at retail have been materially reduced.

Some few dealers have reported an increased volume of business and the report of the Department of Commerce on the quantities of the several drugs entered for consumption in the United States during the fiscal year ended June 30, 1915, would appear to indicate that the actual amount of material imported has not varied materially. This is further emphasized by the appended table giving the quantities of the several drugs entered for consumption during the quarters ended September 30 and December 31, 1914, and March 31 and June 30, 1915:

Narcotic drugs—The quantities of the several drugs entered for consumption in the United States during the quarters ended Sept. 30 and Dec. 31, 1914, and Mar. 31 and June 30, 1915.

	July 1 to Sept. 30, 1914.	Oct. 1 to Dec. 31, 1914.	Jan. 1 to Mar. 31, 1915.	Apr. 1 to June 30, 1915.
Coca leaves.....pounds..	365,220	305,451	111,591	325,140
Cocaine.....ounces..	5	5	10	164
Opium.....pounds..	63,755	82,844	84,061	122,346
Powdered.....do....	4,966	22,616	7,087	4,308
Morphine.....ounces..	580		803	
Other alkaloids.....do....	1,028	4,078	2,316	1,204

This table seems to show that the proportionate amount of the several drugs imported during the last quarter of the fiscal year, or during the period of time in which the Federal antinarcotic law was already in effect, was decidedly greater than the total amount for the year. This disproportion can be explained by the fact that the conditions in the drug market at the present time are unusual and that many lots of the drugs ostensibly imported for consumption were in reality designed for reexportation to countries formerly supplied by Germany. Altogether, it may be asserted that it will be at least several years before we can secure adequate and satisfactory information in regard to the actual effect of the Federal law on the consumption of drugs.

This is further emphasized by the fact that by far the greater amount of drugs legitimately used is distributed by illicit dealers in the drugs and that it will require a long period of time before the varied leaks from the legitimate drug trade to the illicit dealer can be located and effectually closed.

During the past year considerable effort has been made to bring State laws into more complete harmony with the Federal law, and no

less than 19 States have enacted more or less comprehensive amendments of their antinarcotic law. While it is true that several of these laws involve unnecessary and perhaps conflicting requirements, the general trend of legislation evidently is to elaborate on the requirement of the Federal law so as to make local laws more effective and definitely to place the responsibility for the continued abuse of narcotic drugs where it rightfully belongs.

A review of recent legislation also suggests the thought that legislators are finally awakening to some degree of appreciation of the fact that the treatment of drug addicts is a psychologic and medical and not a criminal or penologic problem and that adequate provision for the treatment of inebriates must be made to safeguard the drug addict and to reclaim him if possible to a life of usefulness. A recognition of this fact is evidenced by the laws recently enacted in New York, Pennsylvania, Colorado, Connecticut, Hawaii, and the Philippine Islands. A due appreciation of the difficulties involved in the satisfactory treatment and control of drug addicts is also evidenced by legislation requiring the prompt reporting of drug addicts by the general practitioner and the keeping of records of treatment as required by the laws of Colorado and Illinois.

The preventing of the misuse of drugs and of the development of drug addicts involves sociologic and economic problems to meet which the existing State laws should be so amended as to elaborate on the requirements of the Federal antinarcotic law as to the number and kind of drugs proscribed, in order to prevent if possible the abuse of any narcotic drug, even in comparatively small quantities.

Unfortunately all of the State laws enacted up to the present time include exception clauses similar in effect to the intent of section 6 of the Federal antinarcotic law. These exception clauses have very properly been objected to as being subject to possible abuse in that they tend to vitiate the intent as well as the requirements of the law itself.

From a practical point of view it would appear desirable that the responsibility for the use and abuse of narcotic drugs should rest squarely with the members of the medical profession. Dealers in drugs should not be allowed any degree of discretion as to the disposition of dangerous drugs, even in limited quantities, and all stimulating drugs of a narcotic character should be included in the provisions of a law designed, in any way, to restrict the abuse of habit-forming drugs.

To some extent the State laws are even at the present time more comprehensive than the Federal law. The laws of 20 States restrict the sale and use of chloral and its derivatives. Six States restrict the use of cannabis and its preparations, and in 30 States two or more of the synthetic substitutes for cocaine are specifically men-

tioned in the law. In some respects, however, State laws have been found to conflict more or less seriously with the Federal law, and considerable study will be required to avoid difficulties in the simultaneous enforcement of State and Federal legislation.

Many of the difficulties that have been encountered in the enforcement of conflicting legislation are due to the fact that the requirements of State laws do not always coincide with the provisions of the Federal law, and that persons amenable under the act are at times uncertain as to which of the several laws takes precedence.

Some, at least, have overlooked the fact that, so far as the requirements of the Federal law may be concerned, they take precedence over State laws and must be complied with, as a minimum, by all who are licensed to manufacture, sell, or distribute any of the proscribed drugs. On the other hand, in the comparatively few instances in which the State law is more comprehensive than the Federal law, these more comprehensive requirements are not set aside by the Federal law, but serve to emphasize the need for additional restrictions and requirements adequately to safeguard the distribution, sale, or manufacture of any of the narcotic or otherwise dangerous drugs.

Among the additional requirements that might well be included in a State antinarcotic law are:

A further restriction of the quantity, as well as the kind, of drugs that may be sold without providing a satisfactory record.

A satisfactory definition of the rights and privileges of practitioners of pharmacy, medicine, dentistry, and veterinary medicine.

A provision for the revocation of licenses to practice pharmacy, medicine, dentistry, or veterinary medicine that may be held by habitual users of habit-forming drugs.

A provision for the revocation of the license to practice any of the above professions after conviction under the Federal or State laws designed to restrict the sale or use of narcotic drugs.

An adequate appropriation to secure the effectual enforcement of the several requirements embodied in the State law by an established department, board, or commission. The penalties imposed should be in accord with those imposed under the Federal antinarcotic law, and for the second offense, at least, should include the possibility of imprisonment, in the discretion of the court.

In conclusion, it can not be too strongly emphasized that laws designed to restrict the abuse of narcotic drugs are, primarily, public-health measures, and that the economic problems that may be involved should be considered as being of but secondary importance.